TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531

OPERATING PERMIT (Conditional Major) Issued Pursuant to Tennessee Air Quality Act

Date Issued:

Permit Number:
DRAFT PERMIT

Date Expires: March 1, 2013

Issued To:
Tennsco Corporation

Installation Address:
201 Tennsco Drive
Dickson

Installation Description:

Emission Source Reference No.
22-0063

Source 24: Metal Furniture Coating Operation Consisting of: E-Coat Dip Tank, Natural Gas-Fired Boiler, 8-stage Washer, and Natural Gas-fired Cure Oven. NSPS (State).

Source 25: Natural Gas-Fired Boiler. NSPS (Federal).

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated October 17, 2002 (with October 24, 2002 update) and signed by Rocky Bowker, Environmental Coordinator for the permitted facility. If this person terminates his/her employment or is reassigned different duties such that he/she is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(conditions continued on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

SECTION I: The following conditions shall apply to all sections of this permit unless otherwise noted.

2. The permittee has elected to opt-out of being issued a major source operating permit pursuant to Division Rule 1200-3-9-.02(11)(a). The permittee would be considered a major source because their "potential to emit" value for a single hazardous air pollutant (HAP) was greater than 10 tons per year, and for a combination of hazardous air pollutants (HAPs) was greater than 25 tons per year at the time of application. The permittee has agreed to be subject to limitations in order to be below the major source applicability thresholds for HAPs.

3. Any non compliance with any condition(s) of this permit set to restrain the "potential to emit" below the applicability thresholds of 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations, shall be reported in writing to the Technical Secretary within three (3) working days of such discovery. This notification, at a minimum, shall include the identification of the source(s), identification of the permit condition(s) violated and details of the non-compliance.

4. The permittee is placed on notice that **Condition 11** of this operating permit contains limitations that allow the Permittee to opt out of the major source operating permit program requirements specified in Division Rule 1200-3-9- .02(11). Failure to abide by these limits will not only subject the Permittee to enforcement action by the State of Tennessee, but it may also result in the imposition of Federal enforcement action by the United States Environmental Protection Agency and the loss of being Federally recognized as a conditional major source.

   Compliance with **Condition 11** assures that the source will be below the major source applicability thresholds for a single hazardous air pollutant (HAP) of 10 tons per year, and for a combination of hazardous air pollutants (HAPs) of 25 tons per year.

5. The permittee shall submit a written report by March 31 of every year starting in 2004. In this report, the permittee shall state the compliance status of this facility with **Condition 11** of this permit. This report shall cover the preceding calendar year and shall include the records required by **Condition 12.** The permittee shall mail this report to the following address:

   Tennessee Division of Air Pollution Control
   Nashville Environmental Assistance Center
   711 R. S. Gass Blvd.
   Nashville, TN 37243

6. Should proof of compliance for the pollutant(s) with emission limitations placed on this permit be required, the emissions measuring test method(s) and procedure(s) are the following:

Pollutant or Parameter	Testing Methodology
Volatile Organic Compound Content	EPA Method 24 as published in the current 40 CFR 60, Appendix A
Hazardous Air Pollutant Content	EPA Method 311 as published in the current 40 CFR 63, Appendix A
Sulfur Dioxide	EPA Method 6 as published in the current 40 CFR 60, Appendix A
Particulate Matter	EPA Method 5 as published in the current 40 CFR 60, Appendix A

7. Visible emissions from sources at this facility shall not exhibit greater than twenty percent (20%) opacity as determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-3-5-.03(6).

8. The issuance of this permit supersedes any permit(s) previously issued for Source No.'s 22-0063-24 and 22-0063-25.

9. This permit is valid only at this location.

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10. The permittee shall apply for renewal of this permit not less than 60 days prior to the permit's expiration date pursuant to Division Rule 1200-3-9-.02(3).

11. The maximum emission rate from the entire facility for any single hazardous air pollutant (HAP), listed pursuant to Section 112(b) of the Federal Act, shall not exceed 9.9 tons per year. Total emissions of all HAPs from the entire facility shall not exceed 24.9 tons per year. In the event that the emission rates from the entire facility exceed these limits, the permittee shall provide written notification of the exceedance(s) to the Technical Secretary within fifteen (15) days from the date of discovery.

12. The permittee shall calculate the actual quantities of VOC and HAPs emitted from this facility during each calendar month and during each 12 month period. The permittee shall maintain records of these emissions in a form that readily shows compliance with **Conditions 11 and 15** of this permit. (See example below) These logs must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. These logs must be retained for a period of not less than five (5) years.

MONTHLY VOC/HAP EMISSIONS LOG MONTH:

Material Name	Usage (gallons per month (gpm))	VOC Content (pounds VOC per gallon)	VOC Emissions (tons VOC per month)	HAP_1 Content (pounds HAP_1 per gallon)	HAP_1 Emissions (tons HAP_1 per month)	HAP_p Content (pounds HAP_p per gallon)	HAP_p Emissions (tons HAP_p per month)	Total HAP Emissions (tons HAP_1 thru HAP_p per month)
$Material_1$								
$Material_2$								
$Material_i$								
TOTAL								

Note: i = 1, 2, 3,..... n = the number of different materials, and p = 1, 2, 3,..... n = the number of different hazardous air pollutants. Use columns as required for the number of different hazardous air pollutants.

YEARLY VOC/HAP EMISSIONS LOG

Month, Year	VOC Emissions (tons VOC per month)	(*)VOC Emissions (tons VOC per 12 months)	HAP_1 Emissions (tons HAP_1 per month)	(*)HAP_1 Emissions (tons HAP_1 per 12 months)	HAP_p Emissions (tons HAP_p per month)	(*)HAP_p Emissions (tons HAP_p per 12 months)	Total HAP Emissions (tons HAP_1 through HAP_p per month)	(*)Total HAP Emissions (tons HAP_1 through HAP_p per 12 months)
January, Year								
February, Year								
etc.								

(*) The Tons per 12 Month value is the sum of the VOC (or HAP) emissions in the 11 months preceding the month just completed + the VOC (or HAP) emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this log, this value will be equal to the value for tons per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed, that is, 6 (2) represents 6 tons emitted in 2 months.

SECTION II: SOURCE SPECIFIC CONDITIONS

22-0063-24: Metal Furniture Coating Operation Consisting of: E-Coat Dip Tank, Natural Gas-Fired Boiler, 8-stage Washer, and Natural Gas-fired Cure Oven. NSPS (State).

13. Only natural gas shall be used as fuel for this source.

14. Particulate matter (TSP) emitted from this source shall not exceed 0.02 grain per dry standard cubic foot of stack gases and 1.13 pounds per hour. TAPCR 1200-3-7-.04(1).

(conditions continued on next page)

15. Volatile organic compounds (VOC) emitted from this source shall not exceed 66.7 tons during all intervals of twelve (12) consecutive months. TAPCR 1200-3-7-.07(2).

16. The as-supplied VOC content of all VOC-containing materials to be used by this source shall be determined as follows:

    All Coatings, Inks, Adhesives, Thinners, and Solvents - from Material Safety Data Sheets (MSDS) or manufacturer or vendor formulation data which explicitly list the VOC content by weight.

    The results of these determinations shall be compiled in the following tabular format or an alternative format which readily provides the same required information. This table, along with MSDS or other supporting documentation for each material used, shall be maintained at the source location and made available for inspection by the Technical Secretary or his representative, beginning 180 days from the issue date of this permit. If new materials are used, or if material formulation is changed, the table shall be updated within 90 days from the initial date of usage of the new or altered material.

Process Material Description	Material Density (lb/gal)	VOC Content (lb/gal)
Material #1		
Material #2		
etc.		

17. The owner or the operator of this metal furniture coating operation shall not cause, allow or permit to discharge into the atmosphere from each coating line of any volatile organic compounds in excess of 0.90 kilogram (kg) per liter (7.51 lb/gal) of coating solids applied.

18. The owner or operator of this facility shall conduct performance tests for the coating line as required under 1200-3-16-.01(5)(a) each calendar month. The tests shall be used to determine compliance with **Condition 17** of this permit. The following procedures shall be used in the monthly performance test to determine monthly volume weighted average emissions of VOC's in kilogram of VOC per liter of coating solids applied as required under 1200-3-16-.37(4). The volume of coating and the mass of VOC solvent used for thinning purpose shall be determined from company records on a monthly basis. The owner or operator shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or by an analysis of each coating, as received, using EPA Reference Method 24 (as specified in 1200-3-16-.01(5)(g)).

    The volume-weighted average of the total mass of VOC's consumed per unit volume of coating solids applied during each calendar month shall be determined by the following procedures. Unless specified elsewhere, symbols used in equations are defined in 1200-3-16-.37(2).

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18. (continued)

(I) Calculate the mass of VOC's used (M_o + M_d) during each calendar month by the following equation:

$$M_o + M_d = \sum_{i=1}^{n} L_{ci} D_{ci} W_{oi} + \sum_{j=1}^{m} L_{dj} D_{dj}$$

$\sum_{j=1}^{m} L_{dj} D_{dj}$ will be zero if no VOC solvent is added to the coatings, as received.

Where: n = number of different coatings used during the calendar month;
m = number of different diluent VOC-solvents used during the calendar month;
i = the i^{th} coating used during the calendar month; and
j = the j^{th} diluent VOC-based solvent used during the calendar month.
M_o = the mass of VOC's in coatings consumed, as received (kilograms).
M_d = the mass of diluent VOC-solvent consumed (kilograms).
L_c = the volume of each coating consumed, as received (liters).
D_c = density of each coating, as received (kilograms per liter).
W_o = the proportion of VOCs in each coating (or input stream), as received (fraction by weight).
L_d = the volume of each diluent VOC-solvent added to coatings (liters).
D_d = density of each diluent VOC solvent (kilograms per liter).

(II) Calculate L_s, the total volume of coating solids used in the calendar month by the following equation:

$$L_s = \sum_{i=1}^{n} L_{ci} V_{si}$$

Where: L_c = the volume of each coating consumed as received (liters).
V_S = the proportion of solids in each coating (or input stream), as received (fraction by volume).

(III) Calculate the volume-weighted average mass of VOC's consumed per unit volume of coating solids applied (G) during the calendar month by the following equation:

$$G = \frac{M_o + M_d}{L_s T}$$

A transfer efficiency (T) of 0.95 shall be used for this source.

(IV) Calculate the volume-weighted average of VOC emissions to the atmosphere per unit volume of coating solids applied (N) during the calendar month by the following equation:

N = G

(V) If each individual coating used has a VOC content, as received, which when divided by the lowest transfer efficiency at which the coating is applied, results in a value equal to or less than 0.90 kilogram per liter (7.51 lb/gal), then the emissions from that line are in compliance with **Condition 17**, provided no VOCs are added to the coating during distribution or application.

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19. The permittee shall maintain records of all the data and calculations required by **Condition 18** of this permit. These records must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. These records must be retained for a period of not less than five (5) years. TAPCR 1200-3-16-.37(6)(c).

22-0063-25: Natural Gas-Fired Boiler. NSPS (Federal)

20. The maximum total heat input capacity for this source shall not exceed 20,500,000 British Thermal Units per hour (20.5 MMBtu/hr), on a daily average basis.

21. Only natural gas and/or propane shall be used as fuel(s) for this source.

22. Particulate matter (TSP) emitted from this source shall not exceed 0.4 pound per million British Thermal Units (lb/MMBtu) of heat input and 8.25 pounds per hour, on a daily average basis. TAPCR 1200-3-6-.02(2).

23. Sulfur Dioxide (SO_2) emitted from this source shall not exceed 1.0 pound per hour. This emission limitation is established pursuant to Rule 1200-3-14-.01(3) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter dated March 31, 2003 from the permittee. The permittee has requested this limit in order to reduce annual emission fees.

24. A log of the monthly fuel usage for this source must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five (5) years.

(end of conditions)

The permit application gives the location of this source as 36°05’00” Latitude and 87°24’10” Longitude.